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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,813	06/23/2003	Natarajan Ramachandran	D-1181 R1	9839
28995	7590	09/09/2004	EXAMINER	
RALPH E. JOCKE 231 SOUTH BROADWAY MEDINA, OH 44256			HESS, DANIEL A	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/601,813

Applicant(s)

RAMACHANDRAN ET AL.

Examiner

Daniel A Hess

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 6/23/03
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-18, 24-31, 33 and 34 is/are rejected.
- 7) ☒ Claim(s) 13, 19, 23, 32 and 35-37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 16, 20-22 and 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Doig (US 6,390,367). Doig teaches a sensing system in conjunction with an ATM teaching all of the elements and means as recited in claims 16, 20-22 and 26-28. For example, Doig teaches the following:

Re claim 16: Doig clearly shows a housing (figure 1). A user interface includes (figure 2; column 3, lines 35-55) an input device including a card reader 14d. An output device can include any of the several outputs of an ATM: a currency dispenser, a monitor/screen, and a receipt printer. A proximity sensor 40 senses an area in front of the card reader. If (column 3, lines 55-65) the proximity sensor detects a change in the signal due to the positioning of an unauthorized card reader in front of it, an alert signal is generated by a controller.

Re claim 20: Clearly (column 3, lines 55-65) a comparison is made between two states ‘object present’ and ‘object absent’: This requires a data store having at least a baseline for comparing these two states.

Re claim 21: See Doig, column 3, line 62: Alerting a remote host is explicitly discussed.

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Re claim 22: The limitations of the claim actually say very little. In particular, a computer processor memory changes all the time.

Re claim 26: See discussion re claim 16, above.

Re claim 27: Alerting a remote host (column 3, line 62) means sending out some kind of status message.

Re claim 28: When the remote host is alerted (cols. 3 and 4) this serves as notice of an unauthorized reader being present.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-12, 15, 17, 18, 29-31, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doig (US 6,390,367) in view of Dominguez et al. (US 4,971,077).

Re claim 1: Doig clearly shows a housing (figure 1). A user interface includes (figure 2; column 3, lines 35-55) an input device including a card reader 14d. An output device can include any of the several outputs of an ATM: a currency dispenser, a monitor/screen, and a receipt printer. A proximity sensor 40 senses an area in front of the card reader. If (column 3, lines 55-65) the proximity sensor detects a change in the signal due to the positioning of an unauthorized card reader in front of it, an alert signal is generated by a controller.

Doig lacks in that the sensor is not a light sensor but a capacitive sensor.

Dominguez et al. (column 3, lines 45-55) teaches the possibility of substituting light sensors for capacitive sensors in the detection of objections.

In view of Dominguez et al.'s teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the old and well-known light-sensor for the capacitive sensor of Doig because a light sensor is not as sensitive to certain material properties and is likely to fail less under certain circumstances.

Re claim 2: Doig teaches (column 3, lines 15-20) an ATM. It is understood that ATMs are cash-dispensing.

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Re claim 3: See discussion re claim 1 above.

Re claim 4: A controller on an ATM will inherently be operative to cause currency dispensing. In Doig, the sensor appears to be on all of the time, so this would certainly include the times when the card is inserted and removed.

Re claims 5/6: Clearly (column 3, lines 55-65) a comparison is made between two states ‘object present’ and ‘object absent’: This requires a data store having at least a baseline for comparing these two states.

Re claim 7: See Doig, column 3, line 62: Alerting a remote host is explicitly discussed.

Re claim 8: See column 3, lines 60-62: an ATM can be taken out of service if an object is detected, this would certainly somehow, be reflected on the user interface.

Re claim 9: As discussed re claim 4, an alerting means is present, sending a message remotely to indicate the sensor detects the type of fraud recited in claim 1. Sending the same message locally would involve little modification.

In view of the above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known alert message on the screen because a user may have placed a bag or the like in front of the sensor.

Re claim 10: The limitations of the claim actually say very little. In particular, a computer processor memory changes all the time.

Re claim 11: The phrase “surroundingly illuminate” is broad and do not reflect any particular illumination pattern; an LED emitter, which is the simplest kind, can be expected to “surroundingly illuminate.”

Re claim 12: A comparison of sensor output with a baseline is apparently done at all times in Doig.

Re claim 14: Doig shows a housing member, namely a throat (figure 2, ref. 22) bounding the reader slot. This would be one of the most obvious places to put the light sensor as per claim 1, because it is closest to where a number-stealing device would be mounted.

Re claim 15: In Doig, the card reader has a “throat” (figure 2, reference 22) which corresponds to the claimed element.

Re claims 17 and 18: See discussion re claim 1 above.

Re claims 24 and 25: See discussions re claims 11 and 14 respectively.

Re claim 29: See discussion re claim 1 above.

Re claim 30: See discussion re claim 5 above.

Re claim 31: For steps (c) and (d) see discussion re claim 1 above. For step (e), see discussion re claim 10 above.

Re claim 33: Note that in Doig, detection occurs at essentially all times, which would include the time at which the card is removed from the slot.

Re claim 34: Note all ATMs generally dispense cash; regarding the illumination, see discussion re claim 11, above.

#### ***Allowable Subject Matter***

Claims 13, 19, 23, 32 and 35-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Re claims 13, 23 and 32: In addition to the various other limitations, the use of fuzzy logic to interpret the results of sensor output in such a system is not taught or suggested in the prior art of record.

Re claim 19: A controller that turns the sensing system on and off at various times is not taught or suggested by Doig; and in general, the Doig sensing system is understood to simply be on most of the time.

Re claims 35-37: The Doig system simply shuts down if there is reason to suspect a problem. There would be no capture of cards, disabling of accounts or any other such actions: the system would simply shut down and prevent any interaction with it.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nagata et al. (US 6,629,643) is another ATM security system to combat illegal reading.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DH

Daniel A Hess  
Examiner  
Art Unit 2876

**DANIEL STCYR  
PRIMARY EXAMINER**

